OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC238349

HADHB (NM_001281512) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HADHB (NM_001281512) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HADHB
Synonyms:	ECHB; MSTP029; MTPB; TP-BETA
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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ORF Nucleotide Sequence:

>RC238349 representing NM_001281512
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACTATCTTGACTTACCCCTTTAAAAATCTTCCCACTGCATCAAAATGGGCCCTCAGATTTTCCATAA
GACCTCTGAGCTGTTCCTCCCAGCTACGAGCTGCCCCAGCTGTCCAGACCAAAACGAAGAAGACGTTAGC
CAAACCCAATATAAGGAATGTTGTGGTGGTGGATGGTGTTCGCACTCCATTTTTGCTGTCTGGCACTTCG
GGTTTGTTGCATCGGACCAGTGTCCCTAAGGAAGTAGTTGATTATATCATCTTTGGTACAGTTATTCAGG
AAGTGAAAACAAGCAATGTGGCTAGAGAGGCTGCCCTTGGAGCTGGCTTCTCTGACAAGACTCCTGCTCA
CACTGTCACCATGGCTTGTATCTCTGCCAACCAAGCCATGACCACAGGTGTTGGCTTGATTGCTTCTGGC
CAGTGTGATGTGATCGTGGCAGGTGGTGTTGAGTTGATGTCCGATGTCCCTATTCGTCACTCAAGGAAAA
TGAGAAAACTGATGCTTGATCTCAATAAGGCCAAATCTATGGGCCAGCGACTGTCTTTAATCTCTAAATT
CCGATTTAATTTCCTAGCACCTGAGCTCCCTGCGGTTTCTGAGTTCTCCACCAGTGAGACCATGGGCCAC
TCTGCAGACCGACTGGCCGCTGCCTTTGCTGTTTCTCGGCTGGAACAGGATGAATATGCACTGCGCTCTC
ACAGTCTAGCCAAGAAGGCACAGGATGAAGGACTCCTTTCTGATGTGGTACCCTTCAAAGTACCAGGAAA
AGATACAGTTACCAAAGATAATGGCATCCGTCCTTCCTCACTGGAGCAGATGGCCAAACTAAAACCTGCA
TTCATCAAGCCCTACGGCACAGTGACAGCTGCAAATTCTTCTTTCTTGACTGATGGTGCATCTGCAATGT
TAATCATGGCGGAGGAAAAGGCTCTGGCCATGGGTTATAAGCCGAAGGCATATTTGAGGGATTTTATGTA
TGTGTCTCAGGATCCAAAAGATCAACTATTACTTGGACCAACATATGCTACTCCAAAAGTTCTAGAAAAG
GCAGGATTGACCATGAATGATATTGATGCTTTTGAATTTCATGAAGCTTTCTCGGGTCAGATTTTGGCAA
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TCCTTTGGAGAAGTTTAATAACTGGGGTGGATCTCTGTCCCTGGGACACCCATTTGGAGCCACTGGCTGC
AGGTTGGTCATGGCTGCTGCCAACAGATTACGGAAAGAAGGAGGCCAGTATGGCTTAGTGGCTGCGTGTG
CAGCTGGAGGGCAGGGCCATGCTATGATAGTGGAAGCTTATCCAAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

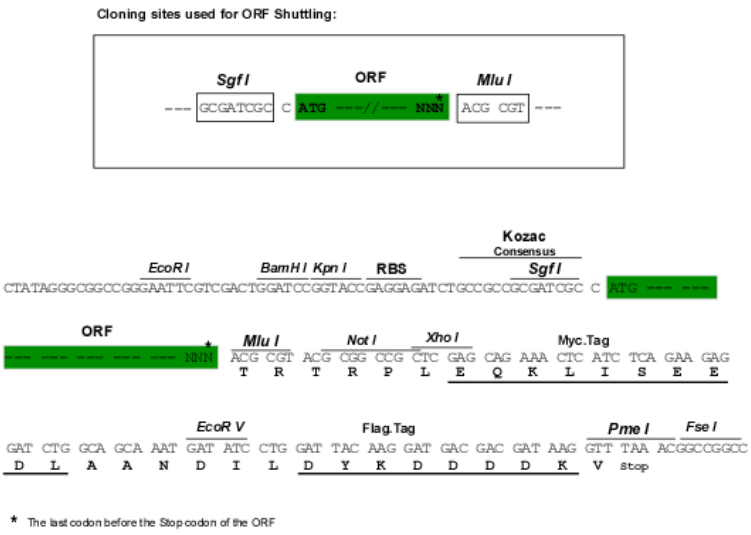
>RC238349 representing NM_001281512
Red=Cloning site Green=Tags(s)

MTILTYPFKNLPTASKWALRFSIRPLSCSSQLRAAPAVQTKTKKTLAKPNIRNVVVVDGVRTPFLLSGTS
GLLHRTSVPKEVVDYIIFGTVIQEVKTSNVAREAALGAGFSDKTPAHTVTMACISANQAMTTGVGLIASG
QCDVIVAGGVELMSDVPIRHSRKMRKLMLDLNKAKSMGQRLSLISKFRFNFLAPELPAVSEFSTSETMGH
SADRLAAAFAVSRLEQDEYALRSHSLAKKAQDEGLLSDVVPFKVPGKDTVTKDNGIRPSSLEQMAKLKPA
FIKPYGTVTAANSSFLTDGASAMLIMAEEKALAMGYKPKAYLRDFMYVSQDPKDQLLLGPTYATPKVLEK
AGLTMNDIDAFEFHEAFSGQILANFKAMDSDWFAENYMGRKTKVGLPPLEKFNNWGGSLSLGHPFGATGC
RLVMAAANRLRKEGGQYGLVAACAAGGQGHAMIVEAYPK

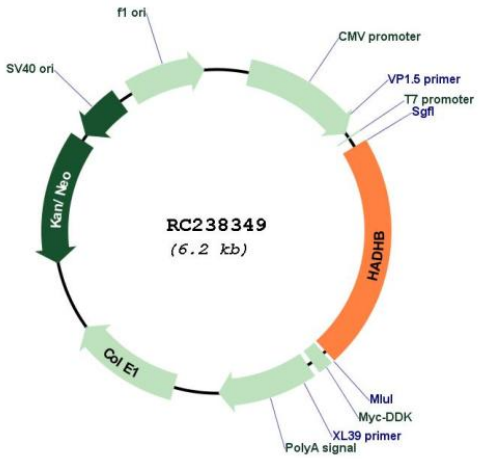
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001281512

ORF Size: 1377 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001281512.1, NP_001268441.1
RefSeq Size:	2151 bp
RefSeq ORF:	1380 bp
Locus ID:	3032
UniProt ID:	P55084
Cytogenetics:	2p23.3
Protein Pathways:	Fatty acid elongation in mitochondria, Fatty acid metabolism, Metabolic pathways, Valine, leucine and isoleucine degradation
MW:	50 kDa
Gene Summary:	This gene encodes the beta subunit of the mitochondrial trifunctional protein, which catalyzes the last three steps of mitochondrial beta-oxidation of long chain fatty acids. The mitochondrial membrane-bound heterocomplex is composed of four alpha and four beta subunits, with the beta subunit catalyzing the 3-ketoacyl-CoA thiolase activity. The encoded protein can also bind RNA and decreases the stability of some mRNAs. The genes of the alpha and beta subunits of the mitochondrial trifunctional protein are located adjacent to each other in the human genome in a head-to-head orientation. Mutations in this gene result in trifunctional protein deficiency. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2013]